

Abstract

A system and method of implementing a Fast Fourier Transform (FFT) function in a high data rate communication network. The communication network, employing technology such as VDSL and DMT or FDM, frequently implements a FFT at a transmitter to transfer frequency domain modulated signals into time domain signals. An IFFT is implemented at the receiver to obtain the original signal. The present system divides the channel bandwidth into sub-bands and performs the FFT function with multiple FFTs in order to reduce chip size and computation time.